UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/775,601	02/10/2004	Brent L. Hild	47097-01249USPT	1780

28763 7590 04/14/2008

BAKER BOTTS L.L.P.
30 ROCKEFELLER PLAZA
44th Floor
NEW YORK, NY 10112-4498

EXAMINER	
TAWFIK, SAMEH	

ART UNIT	PAPER NUMBER
3721	

NOTIFICATION DATE	DELIVERY MODE
04/14/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

DI.NYDocket@bakerbotts.com

Office Action Summary	Application No.	Applicant(s)	
	10/775,601	HILD ET AL.	
	Examiner	Art Unit	
	Sameh H. Tawfik	3721	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 January 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *20-42 and 71-76* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *20-42 and 71-76* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 20-42 and 71-76 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

For example, in claim 20, line 9 and claim 42, line 13; "distributing the plurality of pre-cut fibers in a fluidized stream inside of the film bubble" is not disclosed nor explained clearly on the filed disclosure. Note that the filed specifications paragraphs 084-086 as been referred by applicants for showing the added limitations of "fluidized stream" is not clear disclosed. It is not clear as of how the step of distributing in a fluidized stream will take a place?; etc.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 20-42 and 71-76 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 20, line 9 and claim 42, line 13; "distributing the plurality of pre-cut fibers in a fluidized stream inside of the film bubble"; it is vague and indefinite as it is not clear of how the step of distributing in a fluidized stream will take a place?; etc.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 20-42 and 71-76 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schrenk (U.S. Patent No. 3,589,958) in view of Chisholm (U.S. Patent No. 3,765,922).

Regarding claims 20-22: Schrenk discloses a blown film process for making a fiber reinforced film capable to be used of manufacturing fiber reinforced bag, comprising the steps of providing at least one thermoplastic resin (Fig. 1; via first extruder 11); melting the at least one thermoplastic resin (column 2, lines 10-12; via "heat plastified synthetic resinous thermoplastic material"); extruding the at least one thermoplastic resin through an extension die (via extruder 11) to form a film bubble; introducing a plurality of fibers inside of the film bubble (via filament reinforceing material 31); distributing the fibers inside of the film bubble (via through discharge opening 34); collapsing the film bubble after introducing the plurality of fibers so as to form a fiber-reinforced film (Fig. 1; via upper through rollers 47 and 48), the fiber-reinforced film having a first thermoplastic layer (via extruder 11), a second thermoplastic layer (via second extruder 12), and a plurality of fibers dispersed there-between, see for example (Fig. 1; via yarn

of reinforcing material 31). Note that it is clear and inherent Schrenk's tube been used to make and form bags.

Schrenk does not disclose the steps of forming a first and a second body panel from the fiber-reinforced film; nor closing the first and second body panels along two opposing sides/ folding the film to form one of the opposing sides of the bag nor folding the web to form a bottom to form the fiber-reinforced bag. However, the examiner takes an official notice that such steps of forming bags by closing first and second body panels of plastic films along two opposing sides via by folding one of the opposing sides and folding the web to form a bottom is old, well known, and available in the art.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified Schrenk's method of forming fiber web, to further have steps of forming fiber bag following the steps of forming the fiber web, in order to come up with one machine for forming fiber web and producing fiber bag as well.

Schrenk does not disclose the step of providing the fiber in a pre cut shape nor the step of distributing the plurality of pre cut fibers in a "fluidized stream". However, Chisholm discloses a similar method with providing a plurality of pre cut fibers been distribute in a fluidized stream (Figs. 1 and 3; via 14' and 34'; via as distributing the fiber takes place with the help with the atmospheric air within the tube, which could be considered as "fluidized stream"). Note that it is inherent Chisholm's formed tube will be used to form and make bags.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified Schrenk's by substituting the yarn of material 31 by

pre cut fibers with distributing the fibers in a fluidized stream manner, as suggested by Chisholm, in order to easily control the desired thickness of the web (column 1, lines 55 and 56).

Regarding claim 23: Schrenk discloses that wherein the first and second body panels are respectively formed from two distinct portions of fiber reinforced film (via two different extruders 11 and 12).

Regarding claim 24: Schrenk discloses that wherein the at least one thermoplastic resin is selected from the group consisting of polyolefms, polyesters, nylons, alkenyl aromatic polymers, polyvinyl chlorides, and combinations thereof (column 1, lines 26-30).

Regarding claim 25: Schrenk discloses that the thermoplastic resin is a blend of thermoplastic resins (column 2, lines 10 and 12; via "synthetic resinous thermoplastic material").

Regarding claim 26: Schrenk does not specificly discloses that the thermoplastic resin comprises a blend of a polyolefin and a cyclic olefin copolymer. However, it would have been an obvious matter of design choice to blend a plyolefin and a cyclic olefin copolymer to form thermoplastic resin, since applicants have not disclosed that such the use of specific blend solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with Schrenk's thermoplastic resin.

Regarding claims 27-30: Schrenk disclose that the total thickness of the first and second thermoplastic layer is from about 0.2 mil to about 2.0 mil and/or about 0.4 mil to about 1.0 mil; and the thickness of the fiber reinforced film is from about 0.8 mil to about 2.0 mils and/or 1.0 mil to about 1.6 mils, (see for example Figs. 1, 3, and 4).

Regarding claim 31: Schrenk discloses that the extension die is an annular die (via die 14).

Regarding claims 32, 75, and 76: Schrenk does not disclose that the fibers are electrically charged. However, the examiner takes an official notice that such fibers are capable of being electrically charged and such way of electrically charging fibers is old, well know and available in the art.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified Schrenk's method by electrically charging the fibers, as a matter of engineering design choice, in order to improve it's quality and toughness.

Regarding claims 33 and 34: Schrenk discloses that wherein the plurality of fibers contacts and adheres to an inner surface of the film bubble (Fig. 1; via the reinforced material been dispensed to the inner surface of the tube and been adhered to it).

Regarding claims 35 and 36: Schrenk discloses that wherein the extruding is performed using at least one horizontal/vertical extruder (Fig. 1; via extruders 11 and 12; one could be consider as horizontally oriented while the other broadly could be consider as vertically oriented).

Regarding claim 37: Schrenk discloses that wherein the plurality of fibers is a thermoplastic material (column 1, lines 28 and 29 "synthetic fibers".

Regarding claims 38-41: Schrenk does not specifically disclose that the plurality of fibers is formed from at least two thermoplastic materials; from a polyolefine and a cyclic olefin copolymer; two layers; nor an additive to assist in adhering the plurality of fibers to an inner surface of the film bubble. However, it would have been an obvious matter of design choice to have the plurality of fibers been formed from at least two thermoplastic materials; from a polyolefine and a cyclic olefin copolymer; two layers; and having an additive to assist in

adhering the plurality of fibers to an inner surface of the film bubble, since applicants have not disclosed that such specification solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with Schrenk's fibers and the way it is been contacting the tube.

Regarding claims 71 and 72: Schrenk discloses that the first thermoplastic layer and the second thermoplastic layer are substantially not in contact, Fig. 1; via upper and lower surfaces of tube 16a substantially separated by the reinforcing material 31.

Regarding claims 73 and 74: Chisholm discloses the step of distributing the fibers between layers in a randomized patter, see for example Fig. 3.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified Schrenk's by substituting the yarn of material 31 by pre cut fibers with distributing the fibers in a fluidized stream manner in a randomized patter, as suggested by Chisholm, in order to easily control the desired thickness of the web (column 1, lines 55 and 56).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sameh H. Tawfik whose telephone number is 571-272-4470. The examiner can normally be reached on Tuesday - Friday from 9:00 AM to 7:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi Rada can be reached on 571-272-4467. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sameh H. Tawfik/
Primary Examiner, Art Unit 3721

ST.